

Commercial & Institutional Waste Generation and Recycling Collection Worksheet

Waste Generation and Recycling Collection

Starting or improving a recycling program in your business, not-for-profit, or institution may reduce your total waste collection costs. Waste haulers typically charge based on the size of your container (typically in cubic yards) and collection frequency, not how much trash is actually picked up. Therefore, if you can reduce the trash container size, number of containers or collection frequency by recycling more of your waste, you may save money on your waste collection. The key is diverting as much material from your trash to recycling, as well as reducing the amount of trash and recyclables your organization generates in the first place.

You can use this worksheet to help you decide when you should reduce container size or the frequency of pickup to reduce your total waste collection costs. After completion of this worksheet, keep a copy of it with your Recycling Plan so that your entire recycling program is documented.

Information you need to complete the Waste Generation and Recyclable Collection Worksheet:

- The number and size of garbage and recyclable containers utilized by your organization. This information can be found by checking the containers outside your building or checking your invoice from your waste hauler.
- The number of times per week the garbage and recyclables are collected. This information can be found on your waste hauling invoice or contract.
- How full the containers are when they are serviced. Are they overflowing by the time the truck comes, or are they only half full? Try to come up with an average volume for all your containers at collection time. For example, note whether the containers are half full (50%) or three-fourths full (75%).
- The cost to collect your garbage and recyclables. This information can be found on your waste hauling invoice or contract. Generally, this is a monthly or quarterly fee.

Estimating Your Recycling Rate

Estimating your recycling rate helps you understand how much waste you are diverting from landfills. It's easy to estimate your recycling rate if your trash containers are the same size as your recyclable containers. For this example, we are using two dumpsters for trash and one dumpster for recycling. If both the trash and recycling containers are full at the time of pickup, then 1/3 (one recyclable container of three containers total) or about 33% of the total waste generated by volume is recycled! If your containers are different sizes or your dumpsters are not full every week, try estimating your waste generation and recycling rate using the following worksheet. Remember, this is just an estimate, not a precise calculation.

Notes:		



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Calculate Waste Generation and Recycling Rates		Trash	Recyclables	*Example:	
1.	Size of container Dumpsters are usually sized in cubic yards (typically 1 to 2 yd³ each). Toters are usually sized in gallons (typically 90/96 gallons or about 0.5 yd³ each)	1yd³	1yd³	Trash 4 yd ³	Recyclables 4 yd ³
2.	Number of Containers	2	2	4 dumpsters	2 dumpsters
3.	Collection Frequency How many days per week is your trash collected?	3days/wk.	3 days/wk.	Once per week	Once per week
4.	Total Weekly Trash/Recycling Capacity If your containers are always full at pickup; this is also your Actual Waste Generated (Line 8).	Line (1 x 2 x 3) = 4yd ³ /wk.	Line (1 x 2 x 3) = 4yd ³ /wk.	16 yd³	8 yd³
5.	Weekly Cost for Trash/Recycling Removal Your waste contract will list the total cost, which is typically provided on a monthly basis. If this is the case, divide the monthly cost by four to obtain the average weekly cost.	5. \$ / wk.	5. \$ / wk.	\$120	\$20
6.	Cost per yd ³	Line (5/4) = 6 yd ³	Line (5/4) = 6 yd ³	\$7.50/yd ³	\$2.50/yd ³
7.	Average Fullness of Container Observe the fullness of each container by percentage before it is picked up. Add the percentages for each container and divide by the number of containers.	7%	7%	75% or 0.75	100% or 1
8.	Total Trash/Recycling Generated Compare this value to Line 4. If line 4 is significantly greater than Line 8, you may want to contact your hauler to decrease your collection frequency or container size.	Line (4 x 7) = 8 yd ³	Line (4 x 7) = 8yd ³	(16 x 0.75) = 12	(8 x 1) = 8
9.	Recycling Rate You will need totals from line 8 for both trash (8T) and recyclables (8R) for this calculation.	Line (8R/ (8T + 8R)) x 100 = 9%		(8/(12 + 8)) x 100 = 40%	

^{*}Note: Where six trash containers were needed before recycling the cost of disposal has been reduced from \$180/wk. for trash only to \$140 per week for trash and recycling.

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www.recycling.delaware.gov